

**SAU 50
Grade 3
Mathematics
Measurement and Data**

Measurement: Solve problems using time, liquid [volumes](#), and [masses](#) of objects.

Data: represent and interpret data.

SAU 50 District Competency:

Students will independently use their learning to use measurement tools and units to describe and compare objects, situations, or events.

Students will independently use their learning to gather, represent, and interpret data to answer questions related to real-world situations.

Essential Questions

- What does it mean to measure something?
- Why is accurate measurement important?
- Why are standardized units of measurement necessary?
- How does what is being measured influence the tools used to measure?
- How do we determine the best numerical representations (pictorial, object or symbolic) for a given situation?

Acquisition

Students will demonstrate the following to meet the standards.

- I can tell and write time to the nearest minute.
- I can solve word problems involving addition and subtraction of time intervals showing it on a number line diagram.
- I can estimate and measure liquid volume using standard units.
- I can estimate and measure the mass of an object using standard units.
- I can add, subtract, multiply and divide to solve word problems involving masses or volumes.
- I can draw models to solve a problem.
- I can draw a scaled picture graph and a scaled bar graph to represent a data set with several categories.
- I can solve one- and two-step "how many more" and "how many less" problems using

information in scaled bar graphs.

Standards

NH College and Career Ready Standards

Key to Standard Notation:

3.MD.1: 3 (*grade level*) **MD** (*domain: Measurement and Data*) **1** (*number of the standard*)

Measurement and Data

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

3.MD.1: Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes by representing the problem on a number line diagram.

3.MD.2: Measure and estimate liquid volumes and masses of objects using standard units of grams, kilograms, and liters. Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units by using drawings to represent the problem.

Represent and interpret data.

3.MD.3: Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.

3.MD.4: Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.

[New Hampshire College and Career Ready Standards](#)

References:

National Governors Association Center for Best Practices, Council of Chief State School Officers. (2010). *Common Core Standards for Mathematics* (United States, National Governors Association Center for Best Practices, Council of Chief State School Officers). Retrieved August 10, 2016, from http://www.corestandards.org/assets/CCSSI_Math%20Standards.pdf

Math is fun/definitions. (n.d.). Retrieved April 17, 2017, from <http://www.mathisfun.com/definitions>